

Remarks:

Reconsideration of the application is respectfully requested.

Claims 1 - 33 are presently pending in the application.

Claims 1, 15 and 32 have been amended.

Applicants gratefully acknowledge that item 3 of the above-identified Office Action indicated that claims 12 and 26 would be allowable if rewritten in independent form including all of the limitation of the base claims and any intervening claims.

In item 2 of the above-identified Office Action, claims 1 - 11, 13 - 25 and 27 - 33 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U. S. Patent No. 6,532,228 to Burgess et al ("BURGESS") in view of U. S. Patent No. 6,490,261 to Dent et al ("DENT").

Applicants respectfully traverse the above rejections.

More particularly, Applicants' amended claim 1 recites, among other limitations:

first means for transmitting a first part of a data packet at a predetermined first symbol rate and at a first transmission frequency;

second means for transmitting a second part of the data packet at a second symbol rate different from said predetermined first symbol rate and at a second transmission frequency different from said first

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transmission frequency; [emphasis added by Applicants]

Applicants' amended independent claim 15 recites, among other limitations:

transmitting a first part of a data packet at a predetermined first symbol rate and at a first transmission frequency;

transmitting a second part of the data packet at a second symbol rate different from the predetermined first symbol rate and at a second transmission frequency different from the first transmission frequency; [emphasis added by Applicants]

Similarly, Applicants' amended independent claim 32 recites, among other limitations:

said base station and said mobile station programmed to transmit a first part of a data packet at a predetermined first symbol rate and at a first transmission frequency;

second base station and said mobile station programmed to transmit a second part of the data packet at a second symbol rate different from said predetermined first symbol rate and at a second transmission frequency different from said first transmission frequency; [emphasis added by Applicants]

Further, all of Applicants' independent claims have been amended to recite, among other limitations:

the first part of the data packet and the second part of the data packet being transmitted at least one of to the same mobile station and from the same mobile station. [emphasis added by Applicants]

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As such, all of Applicants' claims require, among other limitations, the transmission of a single data packet that is divided into two parts. This is clear from the language of the claims (i.e., "a first part of a data packet", "a second part of the data packet"). Additionally, that two parts of the same data packet are transmitted by Applicants' invention, is further supported by the specification of the instant application, for example, the Abstract of the instant application, which states:

A data transmission system has a base station and at least one mobile station. Data packets are interchanged between the base station and the mobile station using a time slot method. In this case, first measures are used for transmission of a first part of a data packet at a predetermined first symbol rate and at a first transmission frequency, and second measures are used for transmission of a second part of the data packet at a second symbol rate and at a second transmission frequency. [emphasis added by Applicants]

The above portion of the instant application supports the claimed two parts of the same data packet, by, first, stating that the two parts are parts of a transmitted data packet. Further, support for the two parts forming a single data packet is evident in the recitation that the data packets are interchanged between the base stations and "the" mobile station (i.e., a single mobile station) and, as recited in the claims, that both parts are at least one of: transmitted to

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the same mobile station and transmitted from the same mobile station.

Further, that the two **parts** are both part of a **single** data packet, is further supported in the specification of the instant application, for example, on page 8 of the instant application, lines 2 - 5, which state:

Suitable information in the first part of the data packet allows all the receiving stations to be informed of the second symbol rate and, if appropriate, of the second transmission frequency associated with it. [emphasis added by Applicants]

As such, the specification supports that the first part and the second part are both parts of the same data package, in that the first part includes information on how to received the second part.

The **BURGESS** and **DENT** references both fail to teach or suggest, among other limitations of Applicants' claims, transmitting Applicants' claimed data package in two parts at different symbol rates, as required by Applicants' claims.

More particularly, as stated on pages 2 and 3 of the Office Action:

Burgess fails to specifically disclose first means for transmitting a first part of a data packet at a predetermined first symbol rate and at a first

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transmission frequency; and second means for transmitting a second part of the data packet at a second symbol rate, and at a second transmission frequency, and said second symbol rate differing from said predetermined first symbol rate. [emphasis added by Applicants]

Rather, the Office Action relies on DENT to allegedly disclose Applicants' particularly claimed first and second parts of a data packet. However, Applicants' respectfully disagree that DENT discloses, among other limitations of Applicants' claims, transmitting first and second parts of a data packet, at different symbol rates.

More particularly, DENT discloses transmitting two different data packets, and not two parts of the same data packet. This can be seen, for example, from the Abstract of DENT, which states:

A time-division multiple access (TDMA) base station is disclosed for preserving across-slot signal continuity of signals transmitted in different directions on a given frequency. The base station includes a multi-directional antenna for radiating signals. A processor is operatively coupled to the antenna for generating a first data signal for a first time slot of a TDMA frame including a first pre-determined symbol pattern and a second pre-determined symbol pattern, for generating a second data signal for a second time slot of the TDMA frame including the second predetermined symbol pattern, and for communicating the first data signal and the second data signal to the antenna such that the first data signal is radiated in a first direction and the second data signal is radiated in a second direction. The first data signal is modulated at a first phase for transmission in the first time slot at a first power level in the first direction on the given frequency. The second data signal is

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modulated at a second phase for transmission in the second time slot at a second power level in the second direction on the given frequency. [emphasis added by Applicants]

As such, DENT discloses transmitting two data packets, from a base station, in two different spatial directions (i.e., to two different base stations). Thus, the two data packets, transmitted in DENT, and received by different base stations, cannot possibly be two parts of a data packet, as required by Applicants' claims. The two data packets in DENT received by the same receiving station, as such, they cannot be parts of a single data packet. This failure of DENT is further supported by col. 6 of DENT, lines 5 - 7, which state:

Thus, this implementation of the invention is characterized by transmitting the same syncword S2 in two directions simultaneously during an overlapping period. [emphasis added by Applicants]

Transmitting the same syncword in two different directions, simultaneously, as disclosed in DENT, neither teaches, nor suggests, among other limitations of Applicants' claims, transmitting first and second parts of a data packet, at different symbol rates, as required by Applicants' claims. Rather, due to the transmission of the two data packets (which, in DENT are disclosed as being identical, and not part of a single data packet) in two different spatial directions, the two data packets of DENT must be regarded as independent of each other.

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As such, neither BURGESS, nor DENT, teach or suggest, among other limitations of Applicants' claims, transmitting first and second parts of a data packet, at different symbol rates. Thus, Applicants' claims are believed to be patentable over BURGESS and DENT, taken alone, or in combination.

Further, Applicants' claims require, among other limitations, that the first and second parts be transmitted at different symbol rates and at different transmission frequencies. The transmission of two parts of the same data packet at different symbol rates and at different transmission frequencies, is neither taught, nor suggested by BURGESS or DENT. Rather, pages 2 and 3 of the Office Action attest to the above limitations of Applicants' claims not being disclosed in BURGESS. Among other limitations of Applicants' claims, DENT fails to teach or suggest, transmitting two parts of the same data packet at different symbol rates and at different transmission frequencies.

More particularly, as stated above, DENT fails to disclose transmitting two parts of the same data packet at different symbol rates. Further, DENT fails to disclose transmitting the two data packets (analogized in the Office Action to Applicants' first and second parts) at different transmission

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frequencies. Rather, contrary to Applicants' claimed invention, **DENT** discloses transmitting two separate data packets at the same transmission frequency. This is disclosed in **DENT**, for example, in col. 2 of **DENT**, lines 41 - 44, which state:

Broadly, there is disclosed herein a time-division multiple access (TDMA)base station for preserving across-slot signal continuity of signals transmitted in different directions on a given frequency.

As such, the two, identical data packets are transmitted in different directions on a given frequency (i.e., on the same frequency). As such, **DENT** and **BURGESS** fail to teach or suggest, among other limitations of Applicants' claims, transmitting two parts of a data packet at two different transmission frequencies. Thus, Applicants' claims are believed to be patentable over **BURGESS** and **DENT**, whether taken alone, or in combination.

Further, Applicants' claims specifically recite, among other limitations, that the first part of the data packet is transmitted at a **first symbol rate**, and that the second part of the data packet is sent at a **second symbol rate different from the first symbol rate**. However, neither the **BURGESS** reference, nor the **DENT** reference, teach or suggest transmitting the two parts of the data packet at **different symbol rates**. More particularly, the pages 2 - 3 of the

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Office Action acknowledges that this is not disclosed in **BURGESS**. However, the Office Action points to the Abstract of **DENT** and col. 3 of **DENT**, lines 14 - 37, as allegedly disclosing two packets transmitted at different symbol rates.
Applicants respectfully disagree.

More particularly, the Abstract of **DENT** states:

A time-division multiple access (TDMA) base station is disclosed for preserving across-slot signal continuity of signals transmitted in different directions on a given frequency. The base station includes a multi-directional antenna for radiating signals. A processor is operatively coupled to the antenna for generating a first data signal for a first time slot of a TDMA frame including a first pre-determined symbol pattern and a second pre-determined symbol pattern, for generating a second data signal for a second time slot of the TDMA frame including the second predetermined symbol pattern, and for communicating the first data signal and the second data signal to the antenna such that the first data signal is radiated in a first direction and the second data signal is radiated in a second direction. The first data signal is modulated at a first phase for transmission in the first time slot at a first power level in the first direction on the given frequency. The second data signal is modulated at a second phase for transmission in the second time slot at a second power level in the second direction on the given frequency. [emphasis added by Applicants]

Col. 3 of **DENT**, lines 14 - 37, state:

It is disclosed in accordance with another aspect of the invention a TDMA cellular base station for transmitting signals in different time slots of a TDMA frame in different directions while preserving across-slot signal continuity as seen by intended receivers. The base station includes an antenna for forming a plurality of directional beams. A first signal

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generator modulates a first data signal including a **first pre-determined symbol pattern**, first data symbols and a second pre-determined symbol on a given radio frequency channel to be radiated during a first time slot at a first power level in a first direction using the antenna. The first signal generator smoothly ramps a first data signal level down from the first power level to zero after transmission of **the second pre-determined symbol pattern**. A second signal generator modulates a second data signal including at least **the second pre-determined symbol pattern** and second data symbols on the given radio frequency channel to be radiated during a second time slot at a second power level in a second direction using the antenna. The first and second time slots overlap during transmission of **the second known symbol pattern** and the second symbol generator ramps up from zero to the second power level prior to transmitting the **second pre-determined symbol pattern**. [emphasis added by Applicants]

As such, although **DENT** discloses transmitting first and second predetermined symbol **patterns**, **DENT** does not teach or suggest transmitting first and second **symbol patterns at different symbol rates**. **Symbol patterns** are not the same as **symbol rates**.

As such, among other limitations of Applicants' claims, **BURGESS** and **DENT** fail to teach or suggest, transmitting first and second **parts** of a data packet at **different symbol rates**. As such, Applicants' claims are believed to be patentable over **BURGESS** and **DENT**, whether taken alone, or in combination.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest

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the features of claims 1, 15 and 32. Claims 1, 15 and 32 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1, 15 or 32.

Finally, Applicants appreciatively acknowledge the Examiner's statement that claims 12 and 26 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." In light of the above, Applicants respectfully believe that rewriting of claims 12 and 26 is unnecessary at this time.

In view of the foregoing, reconsideration and allowance of claims 1 - 33 are solicited.

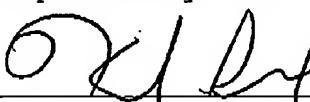
In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made.

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Please charge any fees that might be due with respect to
Sections 1.16 and 1.17 to the Deposit Account of Lerner
Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,



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